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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/762,673	01/22/2004	Michael Holz	510.1093	5146

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Davidson, Davidson & Kappel, LLC
485 17th Avenue
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EXAMINER

ABDI, AMARA

ART UNIT	PAPER NUMBER
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2624

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01/10/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/762,673

Applicant(s)

HOLZ ET AL.

Examiner

Amara Abdi

Art Unit

2624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 October 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date: _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>See Continuation Sheet</u> | 6) <input type="checkbox"/> Other: _____ |

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :01/22/2004
04/29/2004
08/09/2004.

DETAILED ACTION

1. Applicant's response to the last office action, filed October 5, 2007 has been entered and made of record.
2. In view of the Applicant amendments, the objection to claims 2-7 is expressly withdrawn.
3. Applicant's arguments with respect to claims 1-13 have been considered but are moot in view of the new ground(s) of rejection.

Remarks:

4. Applicant's arguments with respect to claims 1-13 have been fully considered but they are not persuasive.

(a) Regarding claim 13, the Applicant argues that Gloger does not teach or disclose: "assigning display color values to the input color values".

However, in response to the Applicant's Arguments, The Examiner would like to point out that the claims are interpreted in light of the specification; limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Gloger clearly mentioned the assigning to the various intensity values in the video image various RGB-values, with which a display optics is controlled in the vehicle, which displays the video image to the vehicle operator in pseudo colors (see paragraph [0014], line 2-7). The RGB-values clearly means display color values, and the various intensity clearly means the input color values. And Gloger clearly mentioned that the

providing of RGB- values is made to each intensity values and not to the entire identified object.

Regarding the new added limitation in claim 13 "environmental condition surrounding the vehicle", the Examiner has considered that limitation but is it moot in view of new ground of rejection (see the rejection of claim 13 under 35 U.S.C 103).

The same thought applies to each one of claims 1-12.

(b) Regarding claim 11, the Applicant argues that neither Groves, Wen-Chiang nor Lathrop teach or disclose: "The device as recited in claim 1, where the display color values are color values of a false color display".

However, in response to the Applicant's Arguments, The Examiner would like to point out that Lathrop clearly discloses that the display color values are color values of a false color display (see column 5, line 29-32). Lathrop is related to process the bit-mapped digital pixel values to generate color display signal (see the Abstract, line 2-3), which is the same filed as an image analysis, therefore, it could be combined with the device of Gloger et al. (see the rejection of claim 11 under 35 U.S.C 103).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1, 8, and 13-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gloger et al. (US-PGPUB 2002/0172400) in view of Breed et al. (US 6,772,057).

(1) Regarding claim 1:

Gloger et al. disclose a vision- enhancing device for a motor vehicle (paragraph [0008], line 1-3), (the improving of the reconcilability is read as the enhancing of vehicle's vision), comprising:

An image-recording device (element 2, Fig. 1) configured to record a plurality of input color values (paragraph [0012], line 1-4), (the recording device is read as camera);

An image-display device (element 6, Fig. 1, paragraph [0014], line 3-4); and

An image-processing device (element 4, in Fig. 1) configured to determine a plurality of display color values (paragraph [0014], line 1-5), (the display color values are read as RGB- values) for display by the image display device (element 6, Fig. 1, paragraph [0014], line 3-4), each display color value (RGB- value) corresponding to a respective input color value (various intensity) (paragraph [0014], line 2-3).

Groves et al. do not explicitly mention that each display color value corresponding to a respective input color value and determined as a function of an environmental condition surrounding the motor vehicle.

Breed et al., in analogous environment, teaches a vehicular monitoring system using image processing, where using a function as an environmental condition surrounding the motor vehicle (column 12, line 37-38).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the system of Breed et al., where monitoring the environment exterior of the vehicle, in the system of Gloger et al. in order to provide a system for monitoring the environment exterior of a vehicle in order to determine the presence and classification, identification and/or location of objects in the exterior environment (column 12, line 37-40).

(2) Regarding claim 13:

Gloger et al. disclose a method for enhancing vision in a vehicle (paragraph [0008], line 1-3), (the improving of the reconcilability is read as the enhancing of vehicle's vision), comprising:

detecting input color values using an image-recording device (paragraph [0012], line 1-4), (the recording device is read as a camera).

assigning display color values to the input color values using an image-processing device (paragraph [0014], line 2-3), (the display color values are read as RGB-values, and the input color values are read as various intensities).

Gloger et al. do not explicitly mention the method, where assigning of the display color values to input color values is performed as a function of an environmental condition surrounding the motor vehicle.

Breed et al., in analogous environment, teaches a vehicular monitoring system using image processing, where using a function as an environmental condition surrounding the motor vehicle (column 12, line 37-38).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the system of Breed et al., where monitoring the environment exterior of the vehicle, in the system of Gloger et al. in order to provide a system for monitoring the environment exterior of a vehicle in order to determine the presence and classification, identification and/or location of objects in the exterior environment (column 12, line 37-40).

(3) Regarding claim 8:

Gloger et al. further disclose the device, where the image-processing device includes a color table generator for generating the plurality of color tables using the input color values (paragraph [0014], line 1-3).

(4) Regarding claim 14:

Gloger et al. disclose a vision- enhancing device for a motor vehicle (paragraph [0008], line 1-3), (the improving of the reconcilability is read as the enhancing of vehicle's vision), comprising:

An image-recording device (element 2, Fig. 1) configured to record a plurality of input color values (paragraph [0012], line 1-4), (the recording device is read as camera);

An image-display device (element 6, Fig. 1, paragraph [0014], line 3-4); and

An image-processing device (element 4, in Fig. 1) configured to determine a plurality of display color values (paragraph [0014], line 1-5), (the display color values are read as RGB- values) for display by the image display device (element 6, Fig. 1, paragraph [0014], line 3-4), each display color value (RGB- value) corresponding to a respective input color value (various intensity) (paragraph [0014], line 2-3).

Groves et al. do not explicitly mention a plurality of predetermined areas, and that each display color value corresponding to a respective input color value and determined as a function of an environmental condition surrounding the motor vehicle.

Breed et al., in analogous environment, teaches a vehicular monitoring system using image processing, where using a dynamic pixel camera having a plurality of pixels (column 18, line 33-36), (the plurality of pixels is read as a plurality of a predetermined areas), and using a function as an environmental condition surrounding the motor vehicle (column 12, line 37-38).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the system of Breed et al., where monitoring the environment exterior of the vehicle and using a plurality predetermined area, in the system of Gloger et al. in order to provide a system for monitoring the environment exterior of a vehicle in order to determine the presence and classification, identification and/or location of objects in the exterior environment (column 12, line 37-40).

(5) Regarding claim 15:

Gloger et al. disclose all the subject matter as described in claim 14 above.

Gloger et al. do not explicitly mention the device, where each predetermined area is a pixel.

Breed et al., in analogous environment, teaches a vehicular monitoring system using image processing, where each predetermined area is a pixel (column 12, line 37-38).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the system of Breed et al., where each predetermined area is a pixel, in the system of Gloger et al. in order to determine the presence and classification, identification and/or location of objects in the exterior environment (column 12, line 37-40).

(6) Regarding claim 16:

Gloger et al. disclose the plurality of color input values (paragraph [0014], line 2-3), (the color values are read as various intensities).

Gloger et al. do not explicitly mention the single pixel.

Breed et al., in analogous environment, teaches a vehicular monitoring system using image processing, where using a pixel camera (column 18, line 37-39).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the system of Breed et al., where using a pixel, in the system of Gloger et al. in order to determine the presence and classification, identification and/or location of objects in the exterior environment (column 12, line 37-40).

7. Claims 9 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gloger et al. and Breed et al., as applied to claim 1 above, and further in view of Groves et al. (US 5,414,439).

(1) Regarding claim 9:

Gloger et al. and Breed et al. disclose all the subject matter as described in claim 1 above.

Gloger et al. and Breed et al. do not explicitly mention the device, where the image-recording device is an infrared camera of a night vision system.

Groves et al., in analogous environment, teaches a head up display with a night vision enhancement, where the image-recording device is an infrared camera (column 1, line 43) of a night-vision system (column 1, line 39).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the system of Groves et al., where using an infrared camera, in the system of Gloger et al. in order to enhance a night vision by infrared imaging in the line of sight of a vehicle operator (column 1, line 38-42).

(2) Regarding claim 12:

Gloger et al. and Breed et al. disclose all the subject matter as described in claim 1 above.

Gloger et al. and Breed et al. do not explicitly mention the device, where the vehicle having the vision enhancing device.

Groves et al., in analogous environment, teaches a head up display with a night vision enhancement, where the vehicle having the vision-enhancing device (column 1, line 39-40; and line 43-44).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the system of Groves et al., where the vehicle has a vision-

enhancing device, in the system of Gloger et al. in order to enhance a night vision by infrared imaging in the line of sight of a vehicle operator (column 1, line 38-42).

8. Claims 2, and 4-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gloger et al. and Breed et al., as applied to claim 1 above, and further in view of Kuwata et al. (US-PGPUB 2002/0044122).

(1) Regarding claim 2:

Gloger et al. and Breed et al. disclose all the subject matter as described in claim 1 above.

Gloger et al. and Breed et al. do not explicitly mention the memory unit for storing a plurality of color tables.

Kuwata et al., in analogous environment, teaches a processing of an image data supplied to an image display apparatus, where the system comprises a memory (paragraph [0033], line 6-8) for storing a plurality of color tables (paragraph [0096], line 4-7).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the system of Kuwata et al., where using the memory unit, in the system of Gloger et al. in order to carry out an image processing of image data, which are to be supplied to an image display apparatus having less number of expressible tones than the number of tones included in original image data, thus improving picture quality of resulting displayed images (paragraph [0014], line 2-6).

(2) Regarding claim 4:

Gloger et al. further disclose the device, where at least one of the pluralities of color tables is selectable taking into consideration a current user of the device (paragraph [0014], line 1-4).

(3) Regarding claim 5:

Gloger et al. further disclose the device comprising: a sensor and a vehicle component having an operating state (paragraph [0012], line 2); and a control device for selecting the one of the plurality of color tables using at least one of a value output of the sensor and information relating to the operating state of the vehicle component (paragraph [0017], line 4-10).

(4) Regarding claim 6:

Gloger et al. further disclose the device, where the control device (10 in Fig.1) is configured to select the at least one of the plurality of color tables (4 in Fig. 1) using a property of an image data recorded by the image-recording device (2 in Fig. 1) (paragraph [0012], line 3, and paragraph [0017], line 10-12), (the control device is read as a color matching device, the color table is read as color generator, and the recording device as camera).

(5) Regarding claim 7:

Gloger et al. further disclose the device, comprising an operating unit (6 in Fig. 1) configured to select the at least one of the plurality of color tables (4 in Fig. 1) from an operating action of a user (paragraph [0014], line 4-6, and paragraph [0022], line 1-2), (the operating unit is read as the display optic, and the user as a vehicle operator).

9. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gloger et al., Breed et al and Kuwata et al., as applied to claim 2 above, and further in view of Groves et al. (US 5,414,439).

Gloger et al., Breed et al and Kuwata et al. disclose all the subject matter as described in claim 2 above.

Gloger et al., Breed et al and Kuwata et al. do not explicitly mention that the image processing device includes a logic unit configured to determine display color value corresponding to input color values that are not stored in the plurality of color tables

Groves et al., in analogous environment, teaches a head up display with a night vision enhancement, where the image processing device includes a logic unit configured to determine display color value corresponding to input color values that are not stored in the plurality of color tables (column 3, line 68; and column 4, line 1-6), (it is read that the control unit has the same function as the logic unit, and since there is no color table in the Groves et al. patent, the examiner interpreted that the control unit determines display color value that are not stored the plurality of color tables).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the system of Groves et al., where determining display color value, in the system of Gloger et al. in order to enhance a night vision by infrared imaging in the line of sight of a vehicle operator (column 1, line 38-42).

10. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gloger et al. and Breed et al., as applied to claim 1 above, and further in view of Matsuda et al. (US-PGPUB 2003/0147053).

Gloger et al. and Breed et al. disclose all the subject matter as described in claim 1 above.

Gloger et al. and Breed et al. do not explicitly mention the device, where the display color values are color grayscale values.

Matsuda et al., in analogous environment, teaches an image display system, that performs a grayscale correction in accordance with on-site environment, where the display color values are color grayscale values (paragraph [0099], line 3-7)

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the system of Matsuda et al., where using color grayscale values, in the system of Gloger et al. in order to perform a grayscale correction more rapidly during calibration as well as it can perform grayscale correction that is appropriate for the on-site environment (paragraph [0011], line 4-5; and paragraph [0012], line 3-4).

11. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gloger et al. and Breed et al., as applied to claim 1 above, and further in view of Lathrop (US 4,857, 901).

Gloger et al. and Breed et al. disclose all the subject matter as described in claim 1 above.

Gloger et al. and Breed et al. do not explicitly mention that the display color values are color values of a false color display.

Lathrop, in analogous environment, teaches a display controller utilizing attribute bits, where the display color values are color values of a false color display (column 5, line 29-32).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the system of Lathrop, where the display color values are color values of a false color display, in the system of Gloger et al. in order to display a controller system in which the mode of configuration by which pixels are interpreted can be flexibly varied across a display screen (column 2, line 14-17).

Conclusion

12. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Contact Information:

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amara Abdi whose telephone number is (571) 270-1670. The examiner can normally be reached on Monday through Friday 7:30 Am to 5:00 PM E.T..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wu Jingge can be reached on (571) 272-7429. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Amara Abdi
12/23/2007

JINGGE WU
SUPERVISORY PATENT EXAMINER

